CONCEPT IQ. Enhanced RF LED Terminal.

Part Number: 995500RF

Installation Manual.

The Enhanced RF LED Terminal is a versatile operator interface for the Concept IQ system providing standard LED Terminal functions along with an interface for the Inner Range Wireless Keyfob Remote Control. The Terminal provides status display of up to 16 Zone Inputs and 4 Areas along with indication of "Power", "Fault", "Home Mode" and "Armed" conditions.
Audible button press feedback is provided and the built-in Beeper also provides indication of Alarms, Entry/Exit warnings, Auto-Arm warning, User Operation OK and User Operation Unsuccessful.
While the system can be programmed via Upload/Download software, the Terminal also provides the ability for the Installer to program all system parameters.

In addition to these standard functions, the RF Enhanced Terminal also provides an interface for the Concept IQ RF Remote Receiver. Up to 6, Four button Keyfob Remotes can then be programmed to:
- Arm and Disarm the Areas in the User's Area List.
- Turn Auxiliary 2 on the Control Module On and Off.
- Activate a Panic alarm by pressing any 2 keys simultaneously.

NOTES:
1) The Enhanced RF Terminal is compatible with Concept IQ Control Module Firmware Version 1.28 or later.
2) The Enhanced RF Terminal DOES NOT provide Door Access Control functions.
3) The RF Receiver (P/N 995509) and Four Button Keyfob Remotes (P/N 995508) are purchased separately.

PARTS LIST.

- Concept IQ Enhanced RF LED Terminal.
- Mounting Backplate.
- Zone List Label. (Adhesive)
- Installation manual. (This document)

SPECIFICATIONS.

Dimensions.	Length. 132mm	Width. 85mm	Depth. 28mm
Weight:	150 grams.		
Installation Environment.			
Continuous Operating Temp:	0 to +50 °C		
Storage Temperature:	-20 to +70 °C		
Relative Humidity:	15% to 85% Non-condensing.		
Operating voltage:	11V to 14V DC.		
Current consumption:	Standby. 32mA.	50mA with 8 LEDs On.	
RF Receiver. (Part No. 995509 -purchased separately)			
Dimensions:	Length. 110mm	Width. 30mm	Depth. 10mm
Current Consumption:	7.5mA		

Disclaimer: 1. The manufacturer &/or it's agents take no responsibility for any damage, financial loss or injury caused to any equipment, property or persons resulting from the correct or incorrect use of the system or it's peripherals. The purchaser assumes all responsibility in the use of the system and it's peripherals.
2. While every effort has been made to ensure the accuracy of this manual, the manufacturer assumes no responsibility or liability for any errors or omissions. Due to ongoing development, this manual is subject to change without notice.

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INSTALLATION. ***Connection diagrams provided on the next page.***

The Concept IQ LAN

The Enhanced RF Terminal is one of a number of different types of Concept IQ LAN Modules. A maximum of 4 LAN Modules can be connected to the system LAN. Other types of LAN Modules are Standard and Enhanced LED Terminals and RF Modules.

LAN cabling considerations.

- Recommended cable is 4 core or 6 core security cable 14/0.20. (NOT twisted pair. Twisted pair cable [e.g. Category 5] may be used, however, DO NOT combine "Clock" & "Data" on the same pair.)
- Do not apply power to cable until all connections are made and checked.
- Maximum cabling distance from the Control Module to the furthest Module must not exceed 100 metres.
- Maximum total LAN cabling in the system must not exceed 150 metres.
- DO NOT connect the "CLK" & "DATA" wires to the Control Module until all LAN Modules (e.g. Terminals) are Commissioned. (See next page)

Enhanced RF Terminal installation.

- The Terminal must be installed on a flat, vertical surface in an appropriate location. Ensure that the display will be at, or slightly below eye level, for all Users.
- Remove the rear mounting plate from the back of the Terminal.
- Cut suitable holes in the mounting surface for cable entry and the fasteners. (The rear mounting plate can be used as a template)
  NOTE: The Terminal is also designed to be mounted on plasterboard/gyprock surfaces using a standard switch plate Mounting Clip. e.g. Clipsal 154 or HPM 712.
- The rear mounting plate can now be installed using appropriate fasteners through the holes provided. Remember to insert the LAN cable and other wiring through the cable entry cutout first.
- Connect the LAN wiring into the Screw Terminal block T2.

ACCESS TO THE TERMINAL PCB IS REQUIRED FOR RF RECEIVER WIRING AND COMMISSIONING. (INCLUDES ENROLLING THE REMOTES) DO NOT CLIP THE TERMINAL ONTO THE REAR MOUNTING PLATE UNTIL ALL WIRING AND COMMISSIONING IS COMPLETED.

RF Receiver Installation.

- Install the RF Receiver (Part No. 995509) in a suitable location not more than 10 metres cabling distance from where the Enhanced RF Terminal is installed.
  NOTE: A 2 metre cable is supplied with the RF Receiver. If convenient, it is recommended that the Receiver is installed within 2 metres cabling distance from the RF Terminal.
  If the cabling distance is greater than 2 metres, an additional length of cable will be required to extend the length of the supplied cable. 4 core security cable is recommended.
- Remove the 4 way connector on the flying end of the cable by cutting the wires close to the connector. This will leave approximately 30mm flying leads for connection to the Terminal.
- Strip 5mm of insulation from the Red, Black and Brown wires to prepare for termination and route the cable to the Enhanced RF Terminal. (The Blue wire is not used)
- Terminate the Red, Black and Brown wires into the +LAN, 0V and Zone1 connections respectively, as shown in the diagram opposite.

Other connections.

- The "Zone2" Input and "Aux1" Output are not utilized on RF Enhanced Terminals at this time.

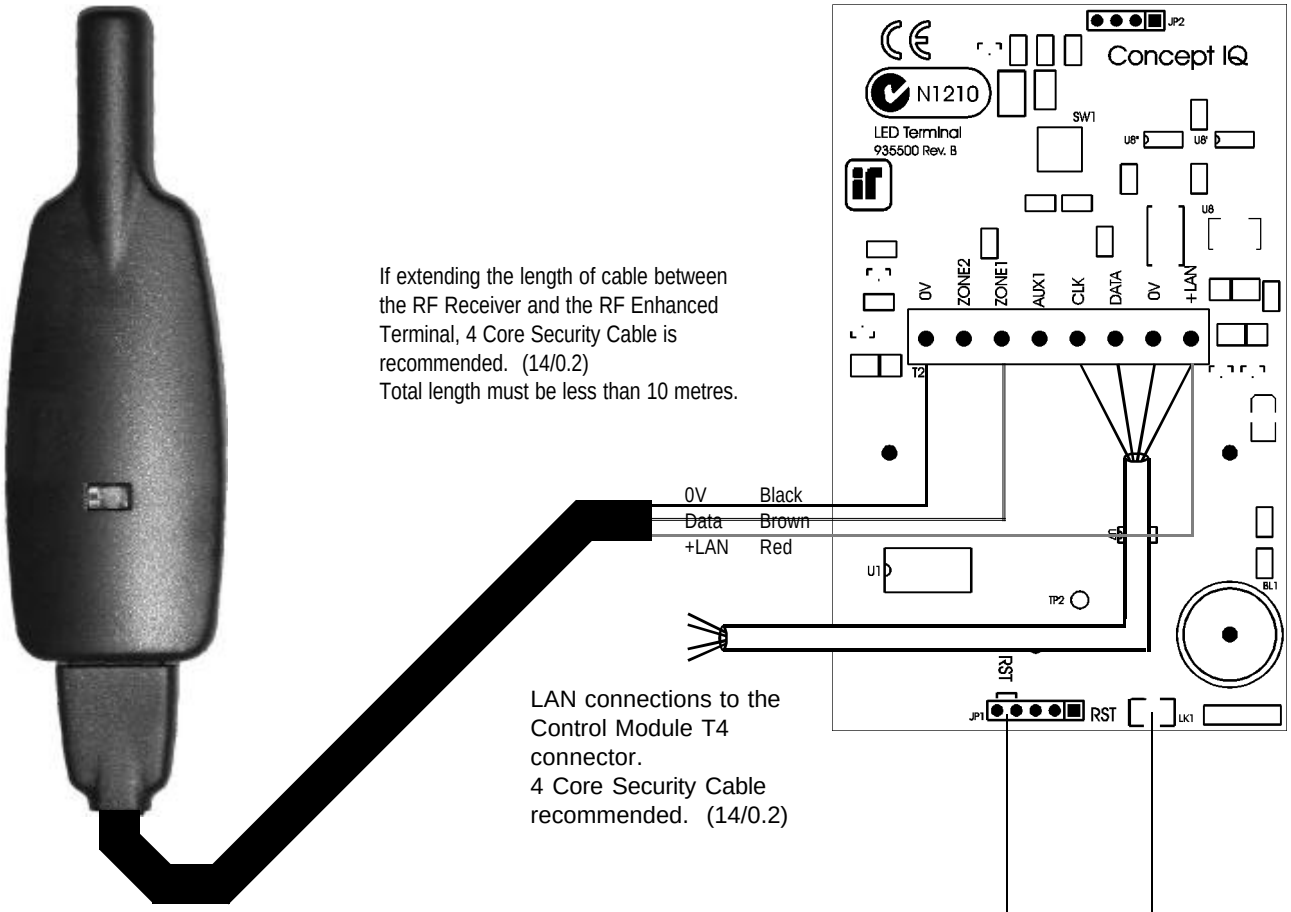
Fit the Terminal to the Rear Mounting Plate.

- When wiring & commissioning is completed, Clip the Terminal onto the rear mounting plate by first locating the tongue at the top of the Terminal into the slot provided by the rear mounting plate, then clip the bottom of the Terminal into place. *See Page 4 for Commissioning instructions.*

Zone List Label.

- A self-adhesive label is provided that can be used to provide Area and Zone information and Emergency alarm activation instructions.
- If required, neatly print the names of any Areas and Zones used in the system in the spaces provided on the label.
- Remove the backing sheet and carefully affix the label to the inside of the keypad cover, ensuring that the top of the label is at the hinged end of the cover. *See diagram opposite.*

INSTALLATION DIAGRAMS



If extending the length of cable between the RF Receiver and the RF Enhanced Terminal, 4 Core Security Cable is recommended. (14/0.2)
Total length must be less than 10 metres.

LAN connections to the Control Module T4 connector.
4 Core Security Cable recommended. (14/0.2)

"RST" (Reset) link.
(Either link can be used)
See "Enable Terminal Configuration Mode. Method 2"

Zone List label fitted to inside of keypad cover.

ADDRESSING & COMMISSIONING (Read "LAN cabling considerations" on Page 2 first)

1. **Enable Terminal Configuration Mode.**
   Method 1: -Remove power from the Terminal.
   -Hold down the <NEXT> and <HOME> keys.
   -Re-apply power to the Terminal.
   -Release the <NEXT> and <HOME> keys.

   Method 2: -Hold down the <NEXT> and <HOME> keys.
   -Short the "RST" (Reset) link on the rear of the Terminal. *(See diagram on Page 3)*
   -Release the <NEXT> and <HOME> keys.

2. **Note the current Address setting.** The current Address of the Terminal will be displayed via the Zone 1 to 4 Lamps.
   -The Zone Lamp number that corresponds to the current Address will flash.

3. **Select the new Terminal Address number.**
   -Press the key that corresponds to the required Address (1 to 4) within 10 seconds, then press <ENTER>.

4. **Check that the current Door Alarm status is Disabled.**
   -After the Terminal Address has been entered as per Step 3, the display will now show the current Door Alarm enable status: 0 = Disabled (Default) 1 = Enabled
   -If the Door Alarm status is Enabled, press the <0> key within 10 seconds to Disable.

5. **Enter RF Remote Keyfob enrolling mode.**
   -While the Door Alarm status is being displayed, Press the <2> key within 10 seconds to enter RF Remote Keyfob enrolling mode.
   -All 4 of the Area LEDs will flash to indicate that programming mode is enabled.

6. **Enrol the Remote Keyfobs into the Terminal.**
   a) Press any key on the first Remote to be enrolled.
   The Terminal will emit a short beep to acknowledge that the Terminal has received the data.

   b) Press the same key on the Remote again to confirm the data.
   After successfully receiving the Remote Keyfob data twice (Through Steps a & b), the Terminal will emit a long beep to confirm that the enrolment was accepted.

7. **a) Enrol additional RF Remote Keyfobs.**
   -Repeat step 6 to enrol up to 5 additional Remotes. (A total of 6 Remotes can be enrolled)

   b) Erasing RF Remote Keyfobs.
   -Press the <9> key at any time while in RF Remote Programming mode to erase all Remotes.

   NOTES:
   1. When 6 Remotes have been enrolled into the Terminal, enrolling any additional Remotes will always overwrite the last Remote that was enrolled. i.e. The first 5 Remotes enrolled will not be affected.
   2. If the RF Terminal does not receive any data from a Remote for 60 seconds, the Terminal will automatically exit Terminal Configuration Mode.
   3. Any Remote that has been enrolled on an RF Terminal cannot perform any operations until it is assigned to a User. *See Step 10 below. "Program the RF Remote operations".*

   -When the <ENTER> key is pressed, the Enhanced Terminal will exit Terminal Configuration Mode.

8. **Initialize the LAN.** If a new Terminal is added to an existing system, once the Terminal is configured and connected to the system LAN, the LAN must be initialized by Removing and Re-applying power to the Control Module. Remember to disconnect the battery also when removing power.

9. **Area Assignment.** RF Enhanced Terminals must be configured for Single Area Mode (Address 961), and an "Associated Area" must be defined for each Terminal (Addresses 952 to 955).
   See Section 9 of the Installation and Programming Manual.

10. **Program the RF Remote Operations.** Each RF Remote is assigned to a User to define the operations allowed.
    -Follow the normal User Programming procedure. (<NEXT> 20)
    -The RF Remote is assigned to the User at the same step, and in the same manner as an Access Card is assigned.
    NOTE: Each User programmed into the system can have an RF Remote OR an Access Card assigned, but not both. If a person requires both of these items, program two Users into the system for that person. Set the options exactly the same for both Users and assign the RF Remote to one of them, and the Access Card to the other.

    User Programming can be found in Section 11 of the Installation and Programming manual, or in the User's manual.